#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011366 Address: 333 Burma Road **Date Inspected:** 06-Jan-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Segment

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

**OBG Trial Assembly Yard** 

## Segment 6CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as BP061-001-055. The welder is identified as #037743 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of fillet weld joint. The Weld joint is designated as BP169-001-058, 059. The welder is identified as #066456 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of fillet weld joint. The Weld joint is designated as SP609-001-053, 054. The welder is identified as #068858 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of fillet weld joint. The Weld joint is designated as SP363-001-054, 055. The welder is identified as #067501 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 5AE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) on the Edge Plate to Deck Plate CJP Splice weld, cross beam side. D scan was performed.

Segment 5BE/5CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) on Side Plate CJP Splice weld, bike path side. D scan was performed.

Segment 6AE/6BE

This QA Inspector observed back gouging of the Side Plate CJP splice weld root pass.

Segment 6AE

This QA Inspector observed match drilling of bolt holes in the Deck Plate for bolted splice connection plate to CB5.

Segment 6AW

This QA Inspector observed welding of base metal repair without prior engineer approval. An Incident Report was written for this issue.

ZPMC Quality Control (QC) Inspector is identified as Fang Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

**Inspected By:** Hernandez, Dan Quality Assurance Inspector

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

**Reviewed By:** Miller,Mark QA Reviewer